Health Care Financing

RESEARCH BRIEF

These brief reports from the Office of Research, Office of Research and Demonstrations, provide Medicare and Medicaid program information on current health care issues.

They are based on data from the Medicare statistical files developed and maintained by the Bureau of Data Management and Strategy, Health Care Financing Administration

Health Care Financing Administration
Office of Research and Demonstrations

Research Brief No. 88-2
Use and cost of short-stay hospital
services under Medicare as related to future policy
and benefit reform: Calendar year 1985

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Since its inception, the Medicare program has had a profound beneficial effect on access to acute health care and on reducing the financial burden of health care for Medicare beneficiaries. Nevertheless, a substantial number of aged and disabled persons enrolled in the Medicare program are still at risk for large amounts of out-of-pocket health care costs. These out-of-pocket expenditures include beneficiary cost-sharing and the cost for health care services not covered by Medicare (e.g., long-term nursing care, dental care, and eyeglasses). As a result, the Health Care Financing Administration has initiated a large number of research and demonstration projects to develop and test means of enhancing the cost effectiveness, management, expansion, and delivery of health care.

The enactment and implementation of the Medicare prospective payment system (PPS) in October of 1983 provided the first major restructuring of the payment system by which participating short-stay hospitals are reimbursed for covered inpatient services. The rationale behind PPS was to curb and control the escalation in Medicare hospital expenditures without concurrently reducing quality of care. By revising the financial incentives inherent in the original retrospective cost-based system, PPS gave hospitals the incentive to hold down costs. Thus, hospitals will earn a profit when costs are below the prospective payment rate or will absorb a loss when costs exceed the prospective payment rate.

PPS has demonstrated that it is a viable reimbursement mechanism for financing short-stay hospital inpatient care. However, PPS is only a forerunner to a series of policy and legislative initiatives that will continue the evolution of Medicare as a prudent buyer of health care, as well as enhance its traditional role as a financier of health care.

Thus, the Medicare program is in a state of transition. Important economic and policy decisions will be made in the near future that will significantly affect its direction, viability, and cost effectiveness. Proposed areas of Medicare reform include:

- New or revised competitive health care delivery systems (e.g., health maintenance organizations and competitive medical plans).
- Restructure of the Medicare benefit package.
- Expansion of Medicare coverage (e.g., long-term care).
- New or revised reimbursement mechanisms.

This Brief provides program data as a basis for studying and evaluating areas of proposed benefit reform, and for measuring and monitoring the effectiveness and operation of the Medicare program. The principal focus of the Brief is on the use and cost of Medicare benefits for aged beneficiaries who used short-stay hospital inpatient services, since reimbursements are substantial and highly concentrated in this population. These data are compared to the use and cost of services for aged Medicare beneficiaries who did not use short-stay hospital inpatient services.

Presented in Table 1 are Medicare trend data on the number of aged persons enrolled, the number of persons served, and amounts reimbursed, by type of service for selected calendar years 1967-85. In Table 2 are shown a distribution of the number of aged Medicare enrollees and amounts reimbursed classified by intervals of short-stay hospital covered days of care (CDOC) used by Medicare beneficiaries during 1985. For aged persons served, the data are further classified by selected total Medicare reimbursement intervals (Table 3) and type of service (Table 4). For reimbursement amounts, the data are classified by type of service (Table 5).

Under PPS, short-stay hospital inpatient CDOC are not directly related to the PPS payment rate. However, one of the ways CDOC are used is to determine the PPS day-outlier expenditures and pass-through per diem amounts.

In summary, PPS has precipitated a series of proposed payment and policy reforms that could substantially modify the way providers are paid and the way care is delivered under the Medicare program. The Medicare program is now at a crossroads concerning its future. The direction taken probably will be decided by the growth of the aging population, the impact of technology, the increase in program expenditures, the changing nature of medical care, and changes in medical problems faced by the elderly. These factors present crucial problems that require major action. The statistics and information in this Brief are intended to provide assistance to managers and administrators who make decisions about Medicare policy and legislative reform.

This Research Brief was prepared by Charles Helbing from the Division of Program Studies, Office of Research. For additional information or for suggestions regarding future topics, please call Charles Helbing at (301) 966-7705 or FTS 646-7705.

Selected data highlights

Table 1 - Enrollment, use, and cost of Medicare services for aged persons, and average annual rates of growth, by type of service: Selected calendar years, 1967-85

- Enrollment of aged persons in the Medicare hospital insurance (HI) and/or supplementary medical insurance (SMI) programs increased from 19.5 million in 1967 to 28.2 million in 1985, an average annual rate of growth (AARG) of 2.1 percent.

- The number of aged persons served who received Medicare HI and/or SMI benefits increased from 7.2 million in 1967 to 20.3 million in 1985, an AARG of 6.0 percent.

- The number of aged persons served per 1,000 enrollees using HI services increased from 203 in 1967 to 251 in 1983, an AARG of 1.3 percent (Figure 1-A). However, from 1983 through 1985, the AARG declined about 6.4 percent (251 to 220 per 1,000 enrollees). For the entire period from 1967-85, the AARG was 0.4 percent.

- For SMI services, the AARG in persons served per 1,000 enrollees was 4.0 percent, from 365 per 1,000 enrollees in 1967 to 739 per 1,000 enrollees in 1985.

- The number of aged persons served per 1,000 enrollees using inpatient hospital services increased at an AARG of 1.7 percent from 1967 (185) to 1983 (242). However, following the implementation of the Medicare PPS for participating hospitals, there was a substantial decrease (7.3 percent) in the AARG of persons served per 1,000 enrollees from 1983 (242) through 1985 (208). Overall, the AARG between 1967 and 1985 was 0.7 percent.

- Home health agency (HHA) services under HI showed the highest AARG (12.5 percent) for the number of aged persons served per 1,000 enrollees from 1967 (7 per 1,000 enrollees) to 1983 (46 per 1,000 enrollees). However, from 1983 through 1985, the AARG (6.3 percent) leveled off somewhat, going from 46 to 52 per 1,000 enrollees. For the entire period from 1967-85, the AARG was 11.8 percent.

- The AARG in persons served per 1,000 enrollees for outpatient services during the 1967-85 period was 8.5 percent (from 84 to 363 per 1,000 enrollees). The AARG was similar for both the pre-PPS (1967-83) and post-PPS (1983-85) periods.

- Total Medicare reimbursements for aged beneficiaries increased from $4.2 billion in 1967 to $56.5 billion in 1985, an AARG of 15.5 percent.

- For inpatient hospital services, expenditures increased from $2.7 billion in 1967 to $30.5 billion in 1983, an AARG of 16.5 percent (Figure 1-B). With the inception of PPS, expenditures increased at an AARG of only 8.0 percent from 1983 ($30.5 billion) through 1985 ($35.6 billion).

- Outpatient reimbursements displayed the highest AARG (29.8 percent) among all Medicare benefits from 1967 ($38 million) through 1983 ($2.5 billion). Similarly, outpatient expenditures showed the highest AARG (19.8 percent) from 1983 ($2.5 billion) through 1985 ($3.5 billion).

- The average total reimbursement per aged person served increased from $592 in 1967 to $2,779 in 1985, an AARG of 9.0 percent (Figure 1-C).

- For inpatient hospital services, the average reimbursement per aged person served increased at an AARG of 12.5 percent from 1967 through 1985 (from $738 to $6,170).

- The average reimbursement per person served for physician and other medical services rose during the same period at an AARG of 8.2 percent (from $191 to $784).

- The average total reimbursement per aged enrollee increased from $217 in 1967 to $2,006 in 1985, an AARG of 13.2 percent (Figure 1-D).

- The highest AARG (26.0 percent) in reimbursement per aged enrollee from 1967 through 1985 was for outpatient services (from $2 to $129); for HHA services under HI, the AARG was 25.2 percent (from $1 to $57).

Table 2 - Enrollment, use, and cost of Medicare services for aged persons, by short-stay hospital covered days of care: Calendar year 1985

- Aged HI enrollees who incurred short-stay hospital (SSH) CDOC (5.7 million) represented 21 percent of all HI enrollees (27.7 million), but accounted for 86 percent ($48.4 billion) of all Medicare reimbursements ($56.5 billion) (Figure 2).

- In contrast, the 22.0 million aged persons (79 percent of all aged HI enrollees) who did not have SSH CDOC accounted for only 15 percent ($8.2 billion) of all Medicare expenditures for the aged ($56.5 billion).

- Of the 22.0 million aged persons who did not use SSH covered services, an estimated 7.3 million persons (26 percent of all HI enrollees) did not use any Medicare services. Approximately 14.6 million beneficiaries (53 percent of all HI enrollees) used Medicare services other than SSH services.

- The average reimbursement per aged beneficiary using SSH CDOC was $8,459. For the 14.6 million beneficiaries using Medicare services who did not have a SSH covered stay, the average total reimbursement was $559 per aged beneficiary.

- For all aged Medicare enrollees, the average reimbursement was $2,042 per enrollee.

Table 3 - Number and percent distribution of aged persons using Medicare services, by selected reimbursement intervals and short-stay hospital covered days of care: Calendar year 1985

- The distribution of beneficiaries using Medicare services was highly skewed. Almost 54 percent (10.9 million) of all persons served (20.3 million) had total Medicare expenditures of less than $500. About 24 percent (4.8 million) of the beneficiaries had total expenditures amounting to $3,000 or more.

- Based on the distribution described above, relatively few beneficiaries incurred a total expenditure that was near the average expenditure of $2,779 per aged person. This distribution reflects the effect of the small proportion of beneficiaries (1.9 percent) who incurred large expenditures (21.1 percent) (Figure 2).

- Of the 5.7 million aged persons who used SSH inpatient services, approximately 59 percent (3.4 million) had from 1 to 10 CDOC. An estimated 69 percent of these persons (2.3 million) incurred total Medicare expenditures ranging from $2,000 to $7,499. The average total Medicare expenditure (from Table 2) for beneficiaries with 1 to 10 CDOC was $4,874 per person and $942 per CDOC.

- About 9 percent (0.5 million) of the beneficiaries with SSH CDOC used more than 30 CDOC; 85 percent of these persons had expenditures of $10,000 or more.

- For the 14.6 million persons served who did not have SSH CDOC, nearly 75 percent (10.9 million) had total Medicare expenditures of less than $500.

Table 4 - Number and percent distribution of aged persons using Medicare services, by type of service and short-stay hospital covered days of care: Calendar year 1985

- Of all aged Medicare HI and/or SMI enrollees (28.2 million--Table 1), about 72 percent (20.3 million) received covered services during 1985.

- About 28 percent (5.7 million) of all aged persons served (20.3 million) used inpatient hospital services, 7 percent (1.4 million) received HHA care, while only about 1 percent (0.3 million) received skilled nursing facility (SNF) care.

- Practically all (19.6 million) of the persons served used SMI physician services and nearly one-half (9.9 million) were reimbursed for outpatient services.

- For those beneficiaries (5.7 million) who used SSH inpatient services, the proportion using HHA, SNF, and outpatient services increased with the number of SSH CDOC.

- Of the aged persons who did not use SSH CDOC (14.6 million), only 3 percent (0.4 million) used SNF, HHA, or long-stay hospital services, while 96 percent (14.0 million) used physician services.

- An estimated 45 percent (6.5 million) of aged persons who did not have SSH CDOC (14.6 million) received outpatient services. These beneficiaries accounted for approximately two-thirds of all aged Medicare persons who used outpatient services (9.9 million).

Table 5 - Amount of reimbursement and percent distribution for aged persons using Medicare services, by type of service and short-stay hospital covered days of care: Calendar year 1985

- Inpatient hospital services accounted for 63 percent ($35.6 billion) of the total Medicare expenditures ($56.5 billion) for the aged during 1985; physician services accounted for 27 percent ($15.4 billion).

- For aged beneficiaries without SSH CDOC, 92 percent of the total expenditures ($8.2 billion) was incurred for physician (68 percent) and outpatient (24 percent) services (Figure 3). The remaining 8 percent was attributed to HHA services (4 percent), long-stay hospital services (3 percent), and SNF services (1 percent).

- For aged beneficiaries using SSH CDOC, nearly 73 percent ($35.3 billion) of the total Medicare expenditures ($48.4 billion) was for SSH inpatient care. The remaining expenditures were distributed as follows: 20 percent ($9.8 billion) for physician services; 3 percent ($1.6 billion) for outpatient services; 3 percent ($1.3 billion) for HHA services; and 1 percent ($0.4 billion) for SNF services.

- By type of service, the distribution of expenditures changed slightly as the number of SSH CDOC increased. That is, the proportion of inpatient hospital expenditures increased slightly (from 70 to 77 percent) as the number of SSH CDOC increased. Conversely, both physician services (from 23 percent to 17 percent) and outpatient services (from 5 percent to 2 percent) decreased slightly as the number of SSH CDOC increased.

Table 1

Enrollment, use, and cost of Medicare services for aged persons, and average annual rates of growth, by type of service: Selected calendar years, 1967-85

Type of service	1967	1971	1975	1978	1981	1983	1985	Average annual rate of growth 1967-83	Average annual rate of growth 1983-85	Average annual rate of growth 1967-85
Persons enrolled in thousands										
Hospital insurance and/or supplementary medical insurance	19,521	20,915	22,790	24,371	26,011	27,109	28,176	2.1	1.9	2.1
Hospital insurance	19,494	20,742	22,472	23,984	25,591	26,670	27,683	2.0	1.9	2.0
Supplementary medical insurance	17,893	19,975	21,945	23,531	25,182	26,292	27,311	2.4	1.9	2.4
Persons served in thousands										
Hospital insurance and/or supplementary medical insurance	7,154	9,425	12,032	14,464	17,036	17,897	20,345	5.9	6.6	6.0
Hospital insurance	3,960	4,416	4,963	5,569	6,229	6,691	6,103	3.3	-4.5	2.4
Inpatient hospital	3,601	4,386	4,913	5,505	6,072	6,441	5,763	3.7	-5.4	2.6
Skilled nursing facility	354	239	260	267	243	257	305	-2.0	8.9	-0.8
Home health agency	126	167	329	540	881	1,228	1,450	15.3	8.7	14.5
Supplementary medical insurance	6,523	9,075	11,762	14,279	16,858	17,675	20,185	6.4	6.9	6.5
Physician and other medical	6,415	8,801	11,396	13,862	16,360	17,209	19,596	6.4	6.7	6.4
Outpatient	1,511	2,171	3,768	5,432	7,096	8,065	9,902	11.0	10.8	11.0
Home health agency	118	83	161	245	187	20	27	-10.5	16.2	-7.9
Persons served per 1,000 enrollees										
Hospital insurance and/or supplementary medical insurance	367	451	528	594	655	660	722	3.7	4.6	3.8
Hospital insurance	203	213	221	232	243	251	220	1.3	-6.4	0.4
Inpatient hospital	185	212	219	230	237	242	208	1.7	-7.3	0.7
Skilled nursing facility	18	12	12	11	9	10	11	-3.6	4.9	-2.7
Home health agency	7	8	15	23	34	46	52	12.5	6.3	11.8
Supplementary medical insurance	365	454	536	609	669	672	739	3.9	4.9	4.0
Physician and other medical	359	441	519	589	650	654	718	3.8	4.8	3.9
Outpatient	84	109	172	231	282	307	363	8.4	8.7	8.5
Home health agency	7	4	7	10	7	1	1	-11.5	0.0	-10.2

See footnote at end of table.

Table 1 - Continued

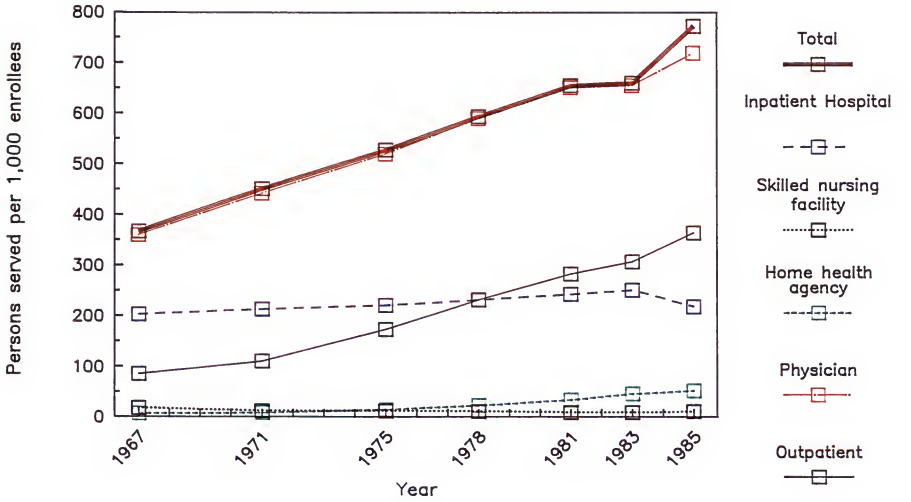
Enrollment, use, and cost of Medicare services for aged persons, and average annual rates of growth, by type of service: Selected calendar years, 1967-85

Type of service	1967	1971	1975	1978	1981	1983	1985	Average annual rate of growth 1967-83	1983-85	1967-85
					Reimbursement amounts in millions					
Hospital insurance and/or supplementary medical insurance	$4,239	$7,349	$12,689	$21,063	$34,490	$46,727	$56,533	16.2	10.0	15.5
Hospital insurance	2,967	5,364	9,209	15,012	24,153	32,141	37,608	16.1	8.2	15.2
Inpatient hospital	2,659	5,156	8,840	14,427	23,111	30,469	35,555 1/	16.5	8.0	15.5
Skilled nursing facility	274	166	233	293	361	413	465	2.6	6.1	3.0
Home health agency	26	42	136	293	682	1,258	1,588	27.4	12.4	25.7
Supplementary medical insurance	1,272	1,986	3,481	6,050	10,336	14,586	18,925	16.5	13.9	16.2
Physician and other medical	1,224	1,848	3,050	5,145	8,688	12,105	15,365	15.4	12.7	15.1
Outpatient	38	125	374	798	1,557	2,460	3,529	29.8	19.8	28.6
Home health agency	17	13	56	107	91	22	31	1.6	18.7	3.4
					Reimbursement per person served					
Hospital insurance and/or supplementary medical insurance	$592	$780	$1,055	$1,456	$2,024	$2,611	$2,779	9.7	3.2	9.0
Hospital insurance	749	1,215	1,855	2,695	3,877	4,804	6,162	12.3	13.3	12.4
Inpatient hospital	738	1,176	1,799	2,621	3,806	4,730	6,170	12.3	14.2	12.5
Skilled nursing facility	774	694	896	1,095	1,486	1,612	1,525	4.7	-2.7	3.8
Home health agency	204	251	413	542	774	1,025	1,095	10.6	3.4	9.8
Supplementary medical insurance	195	219	296	424	613	825	938	9.4	6.6	9.1
Physician and other medical	191	210	268	371	530	703	784	8.5	5.6	8.2
Outpatient	25	57	99	147	219	305	356	16.9	8.0	15.9
Home health agency	145	161	347	437	488	1,098	1,122	13.5	1.1	12.0
					Reimbursement per enrollee					
Hospital insurance and/or supplementary medical insurance	$217	$352	$557	$864	$1,326	$1,724	$2,006	13.8	7.9	13.2
Hospital insurance	152	259	410	626	944	1,205	1,359	13.8	6.2	12.9
Inpatient hospital	137	249	394	602	903	1,143	1,284	14.2	6.0	13.2
Skilled nursing facility	14	8	11	12	14	15	16	0.4	3.3	0.7
Home health agency	1	2	6	12	27	47	57	27.2	10.1	25.2
Supplementary medical insurance	71	99	159	257	410	555	693	13.7	11.7	13.5
Physician and other medical	69	93	139	219	345	460	563	12.6	10.6	12.4
Outpatient	2	6	17	34	62	94	129	27.2	17.1	26.0
Home health agency	1	1	2	5	3	1	1	0.0	0.0	0.0

1/ Includes pass-through payments (amounting to an estimated $4.5 billion) for beneficiaries discharged from short-stay hospitals participating in the Medicare prospective payment system.

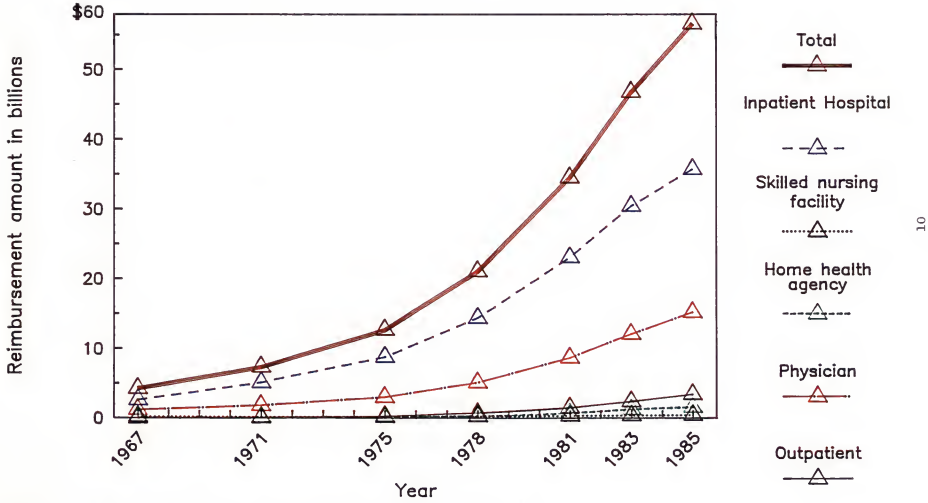
SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Figure 1–A
Number of aged persons served per 1,000 Medicare enrollees, by type of service: Selected calendar years, 1967–85



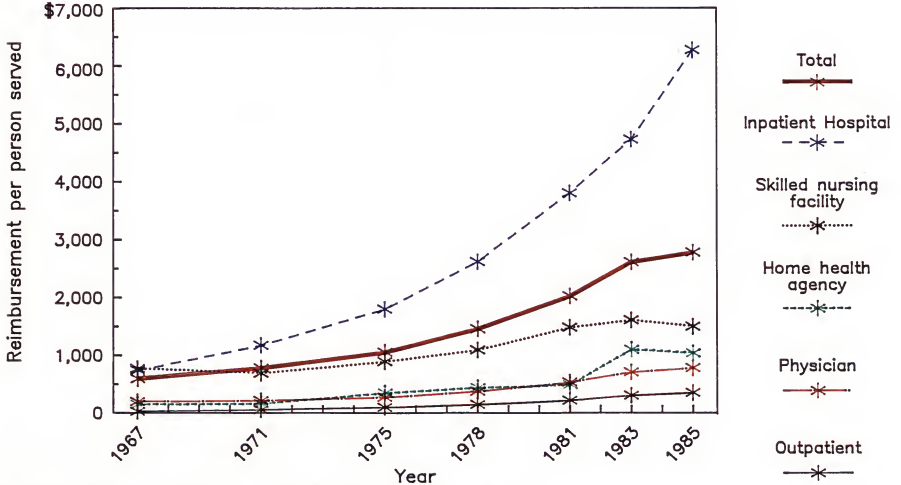
SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Figure 1–B
Amount of reimbursement for aged Medicare beneficiaries, by type of service: Selected calendar years, 1967–85



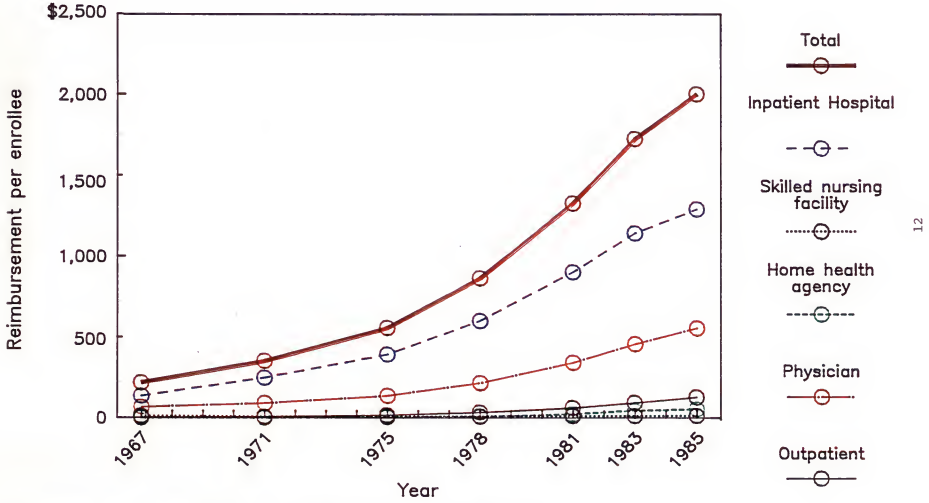
SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Figure 1–C
Average Medicare reimbursement per aged person, by type of service: Selected calendar years, 1967–85



SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Figure 1–D
Average Medicare reimbursement per aged enrollee, by type of service: Selected calendar years, 1967–85



SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Table 2

Enrollment, use, and cost of Medicare services for aged persons, by short-stay hospital covered days of care: Calendar year 1985

SSH covered days of care	Hospital insurance enrollees		SSH covered days of care (CDOC)		Amount of HI and/or SMI reimbursements 1/			
	Number in thousands	Vertical percent	Number in thousands	Average per enrollee	Total in millions	Vertical percent	Average per enrollee	Average per CDOC
Total	27,683.0	100.0	74,847	2.7	$56,533.0	100.0	$2,042	$755
No SSH CDOC	21,966.2	79.4	---	---	8,175.9	14.5	372	---
Used no services 2/	7,337.8	26.5	---	---	---	---	---	---
Used services other than SSH 3/	14,628.5	52.9	---	---	8,175.9	14.5	559	---
One or more SSH CDOC	5,716.8	20.6	74,848	13.1	48,357.1	85.5	8,459	646
1-10 days	3,360.6	12.1	17,393	5.2	16,380.6	29.0	4,874	942
11-20 days	1,323.3	4.8	19,360	14.6	12,971.7	22.9	9,803	670
21-30 days	502.8	1.8	12,565	25.0	7,095.5	12.6	14,112	566
31-40 days	239.6	0.9	8,273	34.5	4,356.2	7.7	18,181	527
41-50 days	122.1	0.4	5,573	45.6	2,635.3	4.7	21,583	473
51-60 days	68.1	0.2	3,806	55.9	1,726.0	3.1	25,345	453
61-90 days	80.5	0.3	5,718	71.0	2,453.9	4.3	30,483	429
91 days and over	19.8	0.1	2,180	110.1	737.9	1.3	37,268	338

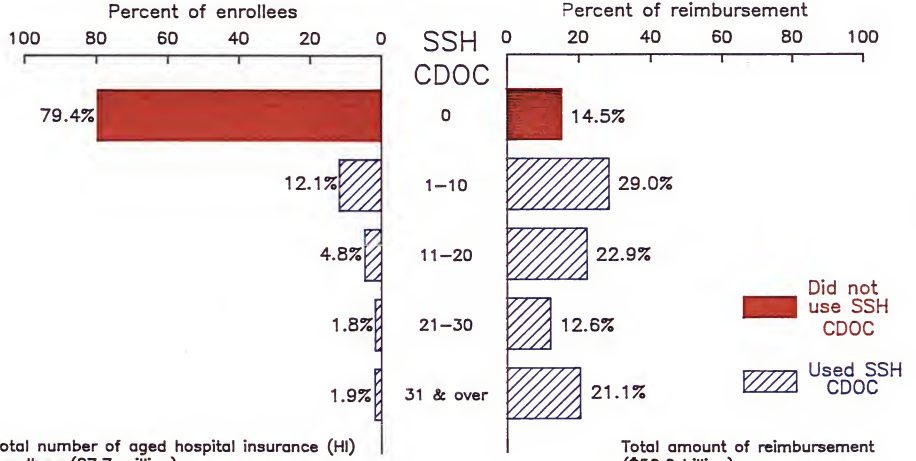
1/ Includes pass-through payments (amounting to an estimated $4.5 billion) for aged beneficiaries discharged from short-stay hospitals participating in the Medicare prospective payment system.
2/ Represents aged HI enrollees who did not use Medicare services.
3/ Represents aged beneficiaries who used Medicare services, but did not incur a SSH stay.

NOTES: HI is hospital insurance. SMI is supplementary medical insurance. SSH is short-stay hospital. CDOC is covered days of care.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Figure 2

Percent distribution of aged Medicare HI enrollees and total amounts reimbursed by number of short-stay hospital (SSH) covered days of care (CDOC), 1985



SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Table 3

Number and percent distribution of aged persons using Medicare services, by selected reimbursement intervals and short-stay hospital covered days of care: Calendar year 1985

SSH covered days of care	Total	HI and/or SMI reimbursement intervals											
		Less than $100	$100-499	$500-999	$1,000-1,999	$2,000-2,999	$3,000-4,999	$5,000-7,499	$7,500-9,999	$10,000-14,999	$15,000-19,999	$20,000-29,999	$30,000 and over
	Number of persons in thousands												
Total	20,345.2	4,774.7	6,142.8	1,902.6	1,502.3	1,219.7	1,675.2	1,060.8	663.1	713.2	311.2	259.2	120.4
No SSH CDOC	14,628.5	4,769.8	6,113.8	1,822.0	991.0	399.7	363.6	108.4	30.1	15.7	8.3	4.1	1.9
One or more SSH CDOC	5,716.7	5.0	29.0	80.5	511.3	820.0	1,311.5	952.4	633.0	697.5	303.0	255.1	118.4
01-10 days	3,360.6	4.6	27.0	77.0	489.5	748.0	1,036.5	538.1	233.8	151.6	32.5	18.0	4.1
11-20 days	1,323.3	0.2	1.4	2.5	18.7	63.8	235.4	321.2	263.7	271.3	82.0	49.6	13.5
21-30 days	502.8	0.1	0.3	0.4	1.9	6.0	30.9	69.6	93.3	156.2	77.8	50.5	15.8
31-40 days	239.6	0.1	0.1	0.2	0.5	1.3	6.0	15.9	28.2	70.0	53.9	47.0	16.4
41-50 days	122.1	0.0	0.0	0.1	0.2	0.3	1.3	4.9	8.9	28.0	28.5	35.4	14.5
51-60 days	68.1	0.0	0.0	0.1	0.1	0.2	0.4	1.4	2.8	11.2	14.3	23.7	13.9
61-90 days	80.4	0.0	0.2	0.1	0.2	0.3	0.8	0.9	1.9	7.8	12.1	26.5	29.5
91 days and over	19.8	0.0	0.0	0.1	0.2	0.1	0.2	0.4	0.4	1.4	1.9	4.4	10.7
	Horizontal percent distribution												
Total	100.0	23.5	30.2	9.4	7.4	6.0	8.2	5.2	3.3	3.5	1.5	1.3	0.6
No SSH CDOC	100.0	32.6	41.8	12.5	6.8	2.7	2.5	0.7	0.2	0.1	0.1	0.0	0.0
One or more SSH CDOC	100.0	0.1	0.8	2.3	14.6	22.3	30.8	16.0	7.0	4.5	1.0	0.5	0.1
01-10 days	100.0	0.1	0.8	2.3	14.6	22.3	30.8	16.0	7.0	4.5	1.0	0.5	0.1
11-20 days	100.0	0.0	0.1	0.2	1.4	4.8	17.8	24.3	19.9	20.5	6.2	3.7	1.0
21-30 days	100.0	0.0	0.1	0.1	0.4	1.2	6.1	13.8	18.6	31.1	15.5	10.0	3.1
31-40 days	100.0	0.0	0.0	0.1	0.2	0.5	2.5	6.6	11.8	29.2	22.5	19.6	6.8
41-50 days	100.0	0.0	0.0	0.1	0.2	0.2	1.1	4.0	7.3	22.9	23.3	29.0	11.9
51-60 days	100.0	0.0	0.0	0.1	0.1	0.3	0.6	2.1	4.1	16.4	21.0	34.8	20.4
61-90 days	100.0	0.0	0.2	0.1	0.2	0.4	1.0	1.1	2.4	9.7	15.0	33.0	36.7
91 days and over	100.0	0.0	0.0	0.5	1.0	0.5	1.0	2.0	2.0	7.1	9.6	22.2	54.0

See NOTES at end of table.

Table 3 - Continued

Number and percent distribution of aged persons using Medicare services, by selected reimbursement intervals and short-stay hospital covered days of care: Calendar year 1985

SSH covered days of care	Total	HI and/or SMI reimbursement intervals											
		Less than $100	$100-499	$500-999	$1,000-1,999	$2,000-2,999	$3,000-4,999	$5,000-7,499	$7,500-9,999	$10,000-14,999	$15,000-19,999	$20,000-29,999	$30,000 and over
	Vertical percent distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No SSH CDOC	71.9	99.9	99.5	95.8	66.0	32.8	21.7	10.2	4.5	2.2	2.7	1.6	1.6
One or more SSH CDOC	28.1	0.1	0.5	4.2	34.0	67.2	78.3	89.8	95.5	97.8	97.4	98.4	98.3
01-10 days	16.5	0.1	0.4	4.0	32.6	61.3	61.9	50.7	35.3	21.3	10.4	6.9	3.4
11-20 days	6.5	0.0	0.0	0.1	1.2	5.2	14.1	30.3	39.8	38.0	26.3	19.1	11.2
21-30 days	2.5	0.0	0.0	0.0	0.1	0.5	1.8	6.6	14.1	21.9	25.0	19.5	13.1
31-40 days	1.2	0.0	0.0	0.0	0.0	0.1	0.4	1.5	4.3	9.8	17.3	18.1	13.6
41-50 days	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.3	3.9	9.2	13.7	12.0
51-60 days	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.6	4.6	9.1	11.5
61-90 days	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	1.1	3.9	10.2	24.5
91 days and over	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	1.7	8.9

1/ Represents Medicare beneficiaries who did not have a covered SSH stay.

NOTES: HI is hospital insurance. SMI is supplementary medical insurance. SSH is short-stay hospital. CDOC is covered days of care.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Table 4

Number and percent distribution of aged persons using Medicare services, by type of service and short-stay hospital covered days of care: Calendar year 1985

SSH covered days of care	Type of service							
		Hospital insurance				Supplementary medical insurance		
	HI and/or SMI	Total	Inpatient hospital	Skilled nursing facility	Home health agency	Total 1/	Physician	Out-patient
	Number of persons in thousands							
Total	20,345.2	6,102.6	5,763.1	304.7	1,450.4	20,185.4	19,595.7	9,902.1
No SSH CDOC	14,628.5	385.9	(2/) 46.3	24.0	325.7	14,591.9	14,042.0	6,461.2
One or more SSH CDOC	5,716.7	5,716.7	5,716.7	280.6	1,124.6	5,593.5	5,553.8	3,441.1
01-10 days	3,360.6	3,360.6	3,360.6	67.9	356.3	3,276.2	3,251.8	1,887.8
11-20 days	1,323.3	1,323.3	1,323.3	88.8	340.6	1,299.7	1,290.9	835.9
21-30 days	502.8	502.8	502.8	50.1	182.0	494.9	491.5	340.9
31-40 days	239.6	239.6	239.6	30.4	100.3	236.4	235.1	167.3
41-50 days	122.1	122.1	122.1	16.5	58.4	120.4	119.7	86.9
51-60 days	68.1	68.1	68.1	9.8	35.2	67.2	66.9	48.8
61-90 days	80.4	80.4	80.4	13.0	42.3	79.2	78.6	58.6
91 days and over	19.8	19.8	19.8	4.1	9.5	19.5	19.3	14.9
	Vertical percent distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No SSH CDOC	71.9	6.3	0.8	7.9	22.5	72.3	71.7	65.3
One or more SSH CDOC	28.1	93.7	99.3	92.1	77.5	27.7	28.3	34.8
01-10 days	16.5	55.1	58.3	22.3	24.6	16.2	16.6	19.1
11-20 days	6.5	21.7	23.0	29.1	23.5	6.4	6.6	8.4
21-30 days	2.5	8.2	8.7	16.4	12.5	2.5	2.5	3.4
31-40 days	1.2	3.9	4.2	10.0	6.9	1.2	1.2	1.7
41-50 days	0.6	2.0	2.1	5.4	4.0	0.6	0.6	0.9
51-60 days	0.3	1.1	1.2	3.2	2.4	0.3	0.3	0.5
61-90 days	0.4	1.3	1.4	4.3	2.9	0.4	0.4	0.6
91 days and over	0.1	0.3	0.5	1.3	0.7	0.1	0.1	0.2

1/ Includes beneficiaries receiving SMI home health agency services not shown separately.
2/ Represents persons receiving long-stay hospital inpatient services.

NOTES: HI is hospital insurance. SMI is supplementary medical insurance. SSH is short-stay hospital.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the

Table 5

Amount of reimbursement and percent distribution for aged persons using Medicare services, by type of service and short-stay hospital covered days of care: Calendar year 1985

SSH covered days of care	Type of service							
	HI and/or SMI	Hospital insurance				Supplementary medical insurance		
		Total	Inpatient hospital 1/	Skilled nursing facility	Home health agency	Total 2/	Physician	Out-patient
	Reimbursement amounts in millions							
Total	$56,533.0	$37,608.5	$35,555.0	$464.7	$1,588.8	$18,924.5	$15,365.2	$3,528.7
No SSH CDOC	8,175.9	647.3 3/	284.4	30.5	332.2	7,528.8	5,549.0	1,949.2
One or more SSH CDOC	48,357.1	36,961.2	35,270.6	434.2	1,256.6	11,395.7	9,816.2	1,579.5
01-10 days	16,380.6	11,908.3	11,484.3	89.1	335.1	4,472.1	3,725.8	746.2
11-20 days	12,971.7	9,984.2	9,493.2	133.9	357.1	2,987.5	2,600.2	387.3
21-30 days	7,095.5	5,555.6	5,262.1	78.9	214.6	1,539.9	1,354.6	185.3
31-40 days	4,356.2	3,446.8	3,271.1	50.1	125.6	909.4	804.1	105.3
41-50 days	2,635.3	2,101.5	1,991.1	28.6	81.8	533.8	476.4	57.5
51-60 days	1,726.0	1,387.7	1,315.5	18.2	54.0	338.3	305.3	33.0
61-90 days	2,453.9	1,981.1	1,884.4	26.6	70.1	472.8	424.3	48.5
91 days and over	737.9	596.0	568.9	8.8	18.3	141.9	125.5	16.4
	Horizontal percent distribution							
Total	100.0	66.5	62.9	0.8	2.8	33.5	27.2	6.2
No SSH CDOC	100.0	7.9	3.5	0.4	4.1	92.1	67.9	23.8
One or more SSH CDOC	100.0	76.4	72.9	0.9	2.6	23.6	20.3	3.3
01-10 days	100.0	72.7	70.1	0.5	2.0	27.3	22.7	4.6
11-20 days	100.0	77.0	73.2	1.0	2.8	23.0	20.0	3.0
21-30 days	100.0	78.3	74.2	1.1	3.0	21.7	19.1	2.6
31-40 days	100.0	78.3	74.2	1.1	3.0	21.7	19.1	2.6
41-50 days	100.0	79.1	75.1	1.2	2.9	20.9	18.5	2.4
51-60 days	100.0	79.7	75.6	1.1	3.1	20.3	18.1	2.2
61-90 days	100.0	80.4	76.2	1.1	3.1	19.6	17.7	1.9
91 days and over	100.0	80.7	76.8	1.1	2.9	19.3	17.3	2.0

See footnotes at end of table.

Table 5 - Continued

Amount of reimbursement and percent distribution for aged persons using Medicare services, by type of service and short-stay hospital covered days of care: Calendar year 1985

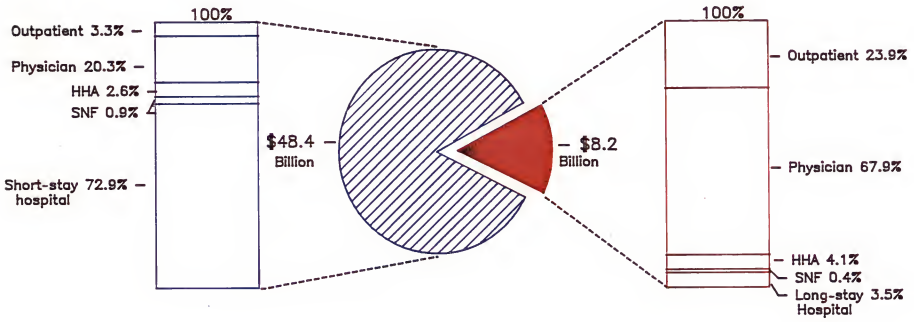
SSH covered days of care	Type of service							
		Hospital insurance				Supplementary medical insurance		
	HI and/or SMI	Total	Inpatient hospital 1/	Skilled nursing facility	Home health agency	Total 2/	Physician	Out-patient
	Vertical percent distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No SSH CDOC	14.5	1.7	0.8	6.6	20.9	39.8	36.1	55.2
One or more SSH CDOC	85.5	98.3	99.2	93.4	79.1	60.2	63.9	44.8
01-10 days	29.0	31.7	32.3	19.2	21.1	23.6	24.2	21.1
11-20 days	22.9	26.5	26.7	28.8	22.5	15.8	16.9	11.0
21-30 days	12.6	14.8	14.8	17.0	13.5	8.1	8.8	5.3
31-40 days	7.7	9.2	9.2	10.8	7.9	4.8	5.2	3.0
41-50 days	4.7	5.6	5.6	6.2	5.1	2.8	3.1	1.6
51-60 days	3.1	3.7	3.7	3.9	3.4	1.8	2.0	0.9
61-90 days	4.3	5.3	5.3	5.7	4.4	2.5	2.8	1.4
91 days and over	1.3	1.6	1.6	1.9	1.2	0.7	0.8	0.5

1/ Includes pass-through payments (amounting to an estimated $4.5 billion) for aged beneficiaries discharged from short-stay hospitals participating in the Medicare prospective payment system.
2/ Includes reimbursements not shown separately for beneficiaries receiving home health agency services under supplementary medical insurance.
3/ Represents persons receiving short-stay and long-stay hospital inpatient services.

NOTES: HI is hospital insurance. SMI is supplementary medical insurance. SSH is short-stay hospital.

Figure 3

Percent distribution of total Medicare reimbursements for beneficiaries who used short-stay hospital (SSH) covered days of care (CDOC) compared to beneficiaries who did not use SSH CDOC, by type of service: Calendar year 1985



NOTE: HHA is home health agency. SNF is skilled nursing facility.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Division of Program Studies.

Definition of terms

Aged beneficiaries: Persons 65 years of age and over are eligible for enrollment in Medicare if they are (1) entitled to monthly Social Security Administration (SSA) benefits or payments from the Railroad Retirement Board (RRB), (2) uninsured for SSA or RRB benefits but transitionally insured for Medicare, or (3) not included in the above groups but purchase hospital insurance (HI) and supplementary medical insurance (SMI) coverage. Persons 65 years of age and over who are identified as having end stage renal disease are included.

Average annual rate of growth: A geometric rate of change in which a variable increases or decreases at the same rate over each year. For example, an average annual rate of change of 10 percent, starting with a base of 100, would increase to 110 in the first year, 121 in the second year, and so on.

Beneficiary: A Medicare enrollee who uses Medicare benefits.

Covered days of care: Represent all short-stay hospital covered days of care used by a person during a calendar year.

Enrollee: A person enrolled in the Medicare program who may or may not use Medicare benefits.

Medicare reimbursement: Amounts reimbursed under the HI program are based on interim rates that are adjusted after the end of each provider's accounting year on the basis of reasonable costs of operation, except for hospitals phased into the prospective payment system during the last calendar quarter of 1983 (see prospective payment system). Payments under SMI are based on allowed (reasonable) charges for medical services determined on the basis of customary and prevailing charges.

Midperiod enrollment: Medicare enrollment as of July 1 has been chosen as the denominator for utilization rates published in this Research Brief series. The choice was based on the similarity of July 1 enrollment to a 12-month average enrollment.

Persons served: Beneficiaries incurring Medicare expenditures. Persons are counted once for each type of covered service used, but are not double counted in aggregate totals. Thus, a person who receives inpatient hospital services and skilled nursing facility services in a year is counted as receiving both of these services but is counted only once in calculating all persons served under HI. In like manner, persons served under both HI and SMI are counted only once in the overall total.

Prospective payment system (PPS): A reimbursement system for participating short-stay hospitals where Medicare payment for inpatient operating costs is made at a predetermined specific rate for each discharge. Discharges are classified according to diagnosis-related groups. The prospective payment rate excludes capital-related costs, direct medical education costs, the costs of bad debts for deductibles and coinsurance incurred by beneficiaries, and kidney acquisition costs,

which continue to be reimbursed under a reasonable cost-based system. The pass-through costs are included in the short-stay hospital expenditures shown in the report.

Type of coverage: Medicare provides two basic types of insurance: a hospital insurance plan and a voluntary supplementary medical insurance plan. Most aged persons may be covered by either one or both plans.

Sources and limitations of data

The data contained in this report are derived from the Medicare statistical system (MSS). This data collection system provides necessary information to measure and evaluate the effectiveness of program operations. MSS is a byproduct of the data processing required to administer the Medicare program.

The data shown in this Brief were derived from a special Health Care Financing Administration (HCFA) file which was generated by linking information from the master short-stay hospital inpatient stay record file (MEDPAR) with information from the person summary file. The resulting statistical record provides information on persons receiving reimbursed services, the amount of reimbursements by type of service, and the period of hospitalization (if any).

The file was generated from statistical records for a 5-percent sample of Medicare beneficiaries. Therefore, the data are subject to sampling variability. Sample counts were multiplied by a factor of 20 to estimate population totals.

These data represent records received and processed in HCFA as of December 1986. Records for 1985 recorded after that date were not included in the file used to prepare this Brief. Therefore, a complete count of all Medicare beneficiaries during 1985 will probably total about 3 percent more than the figures shown in this study.

Acknowledgment

Programming services, graphic figures, secretarial services, and statistical tables were provided by Will Kirby, Thaddeus Holmes, Beverly Ramsey, and Brenda Boos, respectively, of the Division of Program Studies, Office of Research.

Research Brief releases

The following Health Care Financing Research Briefs are available on request from the Office of Research and Demonstrations, Office of Research, Division of Program Studies, Medicare Program Studies Branch:

- No. 85 - 1 Medicare: Inpatient Use of Short-Stay Hospitals, 1983.
- No. 85 - 2 Hospital Outpatient Services Under Medicare: Trends and Demographic Variations, 1983.
- No. 85 - 3 Medicare: Use and Charges for Inpatient Services in Short-Stay Hospitals, by Diagnosis-Related Groups, Calendar Years 1981 and 1984.
- No. 85 - 4 Medicare: Surgical Procedures in Short-Stay Hospitals, by Census Region, 1983.
- No. 86 - 1 Medicare: Use and Cost of Home Health Agency Services, 1983.
- No. 86 - 2 Medicare: Participating Providers and Suppliers of Health Services, December 1985.
- No. 86 - 3 Raising the Age of Eligibility for Medicare to Age 67.
- No. 86- 4 Medicare: Use of Skilled Nursing Facilities, 1984.
- No. 87 - 1 Medicare: Inpatient Use of Short-Stay Hospital Services by Beneficiaries With a Diagnosis of Diabetes Mellitus, 1984.
- No. 87 - 2 Medicare: Use of Specialty Hospitals, 1985.
- No. 87 - 3 Medicare: Deductible and Coinsurance Amounts Incurred by Beneficiaries Discharged from Short-Stay Hospitals, 1983-84.
- No. 87 - 4 Medicare: Use and Cost of Hospital Outpatient Services, 1985.
- No. 87 - 5 Medicaid: Use and Cost of Services, Fiscal Year 1985.
- No. 88 - 1 Use and Cost of Short-Stay Hospital Inpatient Services Under Medicare: Calendar Year 1985.